

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	9653	photopolymer	US-PGPUB; USPAT	AND	ON	2007/06/21 08:05
S2	203750	cured	US-PGPUB; USPAT	AND	ON	2007/06/21 08:06
S3	3506	S1 and S2	US-PGPUB; USPAT	AND	ON	2007/06/21 08:06
S4	148210	lcd	US-PGPUB; USPAT	AND	ON	2007/07/03 15:41
S5	244	S3 and S4	US-PGPUB; USPAT	AND	ON	2007/06/21 08:06
S7	150	photopolymer near3 mixture	US-PGPUB; USPAT	AND	ON	2007/07/03 15:43
S8	11	S7 and (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/06/27 08:51
S9	158808	patterning or embossing	US-PGPUB; USPAT	AND	ON	2007/06/28 10:38
S11	18440	Curing and S9	US-PGPUB; USPAT	AND	ON	2007/06/28 10:39
S13	575	(428/1.2\$).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/06/28 10:40
S14	2657	(428/1.\$2).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/06/28 10:42
S16	158808	patterning or embossing	US-PGPUB; USPAT	AND	ON	2007/06/28 10:46
S17	371	S14 and S16	US-PGPUB; USPAT	AND	ON	2007/06/28 10:52
S18	50773	S16 and polymer	US-PGPUB; USPAT	AND	ON	2007/06/28 10:46
S19	26084	masking and S16	US-PGPUB; USPAT	AND	ON	2007/06/28 10:52
S20	8126	polymer and S19	US-PGPUB; USPAT	AND	ON	2007/06/28 10:53
S21	2561	photo and S20	US-PGPUB; USPAT	AND	ON	2007/06/28 10:54
S22	293	428/1.2.ccls.	US-PGPUB; USPAT	AND	ON	2007/06/28 10:57
S23	264	S22 and polymer	US-PGPUB; USPAT	AND	ON	2007/06/28 12:12
S25	2108	(orient\$6 or align\$5) same (liquid adj crystal) same photo	US-PGPUB; USPAT	AND	ON	2007/06/28 12:15

## EAST Search History

S26	256	(orient\$6 or align\$5) same (liquid adj crystal) same layer same photo same polymer and (stamp or emboss or pattern)	US-PGPUB; USPAT	AND	ON	2007/06/28 12:18
S28	148	(orient\$6 or align\$5) same (liquid adj crystal) same layer same photo same polymer and (stamp or emboss or pattern or mold) same method	US-PGPUB; USPAT	AND	ON	2007/06/28 12:25
S29	50	((("20010050729") or ("20030015110") or ("20030058400") or ("20030141885") or ("20030178750") or ("20040090573") or ("20040114204") or ("20040141118") or ("20050018124") or ("20050094230") or ("20050174340") or ("20050233252") or ("20050259216") or ("20050259217") or ("20060035086") or ("20060078638") or ("20060114344") or ("20060279943") or ("20070046897") or ("20070047037") or ("20070085951") or ("4087182") or ("4201442") or ("4393131") or ("4506004") or ("4528259") or ("4544626") or ("4556627") or ("4610941") or ("4618567") or ("5396839") or ("5477347") or ("5506701") or ("5726782") or ("5754514") or ("5928819") or ("5998101") or ("6174649") or ("6205107") or ("6459463") or ("6525413") or ("6558606") or ("6574523") or ("6608661") or ("6788367") or ("6820550") or ("6859293") or ("6912038") or ("7112359") or ("7227674"))).PN.	US-PGPUB; USPAT	OR	OFF	2007/06/28 12:36
S30	2	((("5844643") or ("4521351"))).PN.	US-PGPUB; USPAT	OR	OFF	2007/06/28 12:37
S32	645	liquid adj crystal alignment layer photopolymer	US-PGPUB; USPAT	AND	ON	2007/06/28 12:50
S33	5618	photopolymer mixture	US-PGPUB; USPAT	AND	ON	2007/06/28 12:52
S34	107	photopolymer mixture homeotropic	US-PGPUB; USPAT	AND	ON	2007/06/28 12:53

## EAST Search History

S35	285	emboss photopolymer	US-PGPUB; USPAT	AND	ON	2007/06/28 13:15
S36	231	emboss photopolymer cur\$4	US-PGPUB; USPAT	AND	ON	2007/06/28 13:16
S37	126	emboss photopolymer curing	US-PGPUB; USPAT	AND	ON	2007/06/28 13:16
S38	1	("5575878").PN.	US-PGPUB; USPAT	OR	OFF	2007/06/28 14:42
S39	1	("6027595").PN.	US-PGPUB; USPAT	OR	OFF	2007/06/28 14:45
S40	1029	(156/275.5).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/06/28 14:52
S41	2	S40 and photopolymer mixture and (emboss or embossed or embossing)	US-PGPUB; USPAT	AND	ON	2007/06/28 14:53
S42	11	(US-20050018124-\$ or US-20070128378-\$ or US-20060051524-\$ or US-20050179003-\$ or US-20050150589-\$ or US-20040256352-\$).did. or (US-4087182-\$ or US-4195997-\$ or US-5575878-\$ or US-6027595-\$ or US-5552009-\$).did.	US-PGPUB; USPAT	AND	ON	2007/06/28 15:07
S43	3	S42 homeotropic	US-PGPUB; USPAT	AND	ON	2007/06/28 15:16
S44	20	photopolymer same viscosity same refractive adj index	US-PGPUB; USPAT	AND	ON	2007/06/28 16:03
S45	4	photopolymer same viscosity same refractive adj index and immiscible	US-PGPUB; USPAT	AND	ON	2007/06/28 16:04
S46	44	photopolymer viscosity refractive adj index and immiscible	US-PGPUB; USPAT	AND	ON	2007/06/28 16:04
S50	1410	(reduce\$2 or lower) with surface adj energy and (acrylate or (polydimethyl adj siloxane))	US-PGPUB; USPAT	AND	ON	2007/07/02 16:51
S52	55	(reduce\$2 or lower) with surface adj energy same (acrylate or (polydimethyl adj siloxane)) same polymer	US-PGPUB; USPAT	AND	ON	2007/07/03 08:41
S53	11	surface adj energy same (acrylate and (polydimethyl adj siloxane))	US-PGPUB; USPAT	AND	ON	2007/07/03 07:26
S54	150	photopolymer near3 mixture	US-PGPUB; USPAT	AND	ON	2007/07/03 15:44
S55	11	S54 and surface adj energy	US-PGPUB; USPAT	AND	ON	2007/07/03 15:46

## EAST Search History

S56	398	photo\$1polymer and surface adj energy	US-PGPUB; USPAT	AND	ON	2007/07/03 15:46
S57	26	photo\$1polymer same (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/07/03 15:49
S58	26	photo\$1polymer same (surface adj energ\$4)	US-PGPUB; USPAT	AND	ON	2007/07/03 15:49
S59	4130	polymer same surface adj energy and mixture	US-PGPUB; USPAT	AND	ON	2007/07/03 16:07
S60	85	S59 and "522".clas.	US-PGPUB; USPAT	AND	ON	2007/07/03 16:09
S61	83	S59 and "522".clas. and low and high	US-PGPUB; USPAT	AND	ON	2007/07/03 16:09
S62	20	S59 and "522".clas. and low near high	US-PGPUB; USPAT	AND	ON	2007/07/03 16:18
S63	643	polar near additive and polymer	US-PGPUB; USPAT	AND	ON	2007/07/03 16:18
S64	9144	additive surface adj energy	US-PGPUB; USPAT	AND	ON	2007/07/03 16:20
S65	2703	polar additive surface adj energy	US-PGPUB; USPAT	AND	ON	2007/07/03 16:20
S66	389	polar additive same (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/07/03 16:20
S67	2	polar near additive same (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/07/03 16:20
S68	465	polymer same additive same (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/07/03 16:21
S69	114	polymer same additive same (surface adj energy) same (lower or reduce)	US-PGPUB; USPAT	AND	ON	2007/07/03 16:21

## EAST Search History

S73	50	((("20010050729") or ("20030015110") or ("20030058400") or ("20030141885") or ("20030178750") or ("20040090573") or ("20040114204") or ("20040141118") or ("20050018124") or ("20050094230") or ("20050174340") or ("20050233252") or ("20050259216") or ("20050259217") or ("20060035086") or ("20060078638") or ("20060114344") or ("20060279943") or ("20070046897") or ("20070047037") or ("20070085951") or ("4087182") or ("4201442") or ("4393131") or ("4506004") or ("4528259") or ("4544626") or ("4556627") or ("4610941") or ("4618567") or ("5396839") or ("5477347") or ("5506701") or ("5726782") or ("5754514") or ("5928819") or ("5998101") or ("6174649") or ("6205107") or ("6459463") or ("6525413") or ("6558606") or ("6574523") or ("6608661") or ("6788367") or ("6820550") or ("6859293") or ("6912038") or ("7112359") or ("7227674"))).PN.	US-PGPUB; USPAT	OR	OFF	2007/09/12 09:30
S74	1	10/531302.app.	US-PGPUB; USPAT	AND	ON	2007/09/12 09:24
S75	299	428/1.2.ccls.	US-PGPUB; USPAT	AND	ON	2007/09/12 09:40
S77	75	428/1.2\$1.ccls. and bistable	US-PGPUB; USPAT	AND	ON	2007/09/12 11:01
S78	389	alignment adj (film or grating or layer) and surface near3 profile	US-PGPUB; USPAT	AND	ON	2007/09/12 09:55
S79	5	alignment adj (film or grating or layer) and surface near3 profile and low near10 (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/09/12 09:56
S81	146	alignment adj (film or grating or layer) and low near10 (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/09/12 09:56

## EAST Search History

S82	106	alignment adj (film or grating or layer) and low near10 (surface adj energy) and liquid adj crystal	US-PGPUB; USPAT	AND	ON	2007/09/12 09:57
S85	1	("6249332").PN.	US-PGPUB; USPAT	OR	OFF	2007/09/12 10:59
S86	388	bistable and grating and liquid adj crystal	US-PGPUB; USPAT	AND	ON	2007/09/12 11:01
S88	117	bistable and grating and liquid adj crystal and homeotropic	US-PGPUB; USPAT	AND	ON	2007/09/12 11:02
S89	430	bistable and (grating or alignment adj film or alignment layer) and liquid adj crystal and homeotropic	US-PGPUB; USPAT	AND	ON	2007/09/12 11:03
S90	70	bistable and (grating or alignment adj film or alignment layer) and liquid adj crystal and homeotropic and (low near10 energy)	US-PGPUB; USPAT	AND	ON	2007/09/12 11:03
S11 0	1	WO02/44801.ptpn.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	AND	ON	2007/09/12 13:38
S11 2	1	("6455140").PN.	US-PGPUB; USPAT	OR	OFF	2007/09/12 13:43
S11 3	37	liquid adj crystal and homeotropic and polymer and low near10 (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/09/12 15:01
S11 4	43	liquid adj crystal and homeotropic and low near10 (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/09/12 15:15
S11 5	4	liquid adj crystal and (vertical adj alignment or vertically adj aligned) same low near10 (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/09/12 15:15
S11 6	1	WO00/59966.ptpn.	US-PGPUB; USPAT; EPO	AND	ON	2007/10/15 08:34
S11 7	1	("5844643").PN.	US-PGPUB; USPAT	OR	OFF	2007/09/12 15:51
S11 8	148	liquid adj crystal same alignment and low near5 (surface adj energy)	US-PGPUB; USPAT	AND	ON	2007/09/12 15:54
S11 9	127	liquid adj crystal same alignment and low near5 (surface adj energy) and (polymer or oligomer or monomer)	US-PGPUB; USPAT	AND	ON	2007/09/12 16:20

## EAST Search History

S12 0	3	liquid adj crystal same alignment and low near5 (surface adj energy) and (polymer or oligomer or monomer) and (428/1.2.ccls. or 428/1.23.ccls.)	US-PGPUB; USPAT	AND	ON	2007/09/12 16:20
S12 2	715	liquid adj crystal and low near5 (surface adj energy) and (polymer or oligomer or monomer)	US-PGPUB; USPAT	AND	ON	2007/09/12 16:20
S12 4	355	liquid adj crystal and low near5 (surface adj energy) and (polymer or oligomer or monomer) and (acrylate or dimethyl adj siloxane)	US-PGPUB; USPAT	AND	ON	2007/09/12 16:22
S12 5	112	liquid adj crystal and low near5 (surface adj energy) and (polymer or oligomer or monomer) and (acrylate or dimethyl adj siloxane) and refractive and viscosity	US-PGPUB; USPAT	AND	ON	2007/09/12 16:23
S12 6	6	low near3 (surface adj energy) same polymer and liquid adj crystal and (dimethyl adj siloxane)	US-PGPUB; USPAT	AND	ON	2007/09/12 17:16
S12 7	62	low near3 (surface adj energy) same polymer and liquid adj crystal and siloxane	US-PGPUB; USPAT	AND	ON	2007/09/12 17:16
S12 8	1	("6919404").PN.	US-PGPUB; USPAT	OR	OFF	2007/09/13 08:57
S12 9	3	WO02/08825.ptpn.	US-PGPUB; USPAT; EPO	AND	ON	2007/10/15 08:36
S13 0	2	PCT/GB01/03168.pct.	US-PGPUB; USPAT; EPO	AND	ON	2007/10/15 08:38
S13 1	2	PCT/EP01/13584.pct.	US-PGPUB; USPAT; EPO	AND	ON	2007/10/15 08:38
S13 4	17	alignment adj (film or grating or layer) and low near10 (surface adj energy) and liquid adj crystal and bistable	US-PGPUB; USPAT	AND	ON	2007/10/23 17:01
S13 5	4	"5384067".pn. or "5453863".pn. or "6172720".pn. or "5661533".pn.	US-PGPUB; USPAT	AND	ON	2007/10/23 17:06
S13 6	2	alignment adj (film or grating or layer) and low near10 (surface adj energy) and liquid adj crystal and bistable near5 zenith\$3	US-PGPUB; USPAT	AND	ON	2007/10/23 17:07
S13 7	53	alignment adj (film or grating or layer) and liquid adj crystal and bistable near5 zenith\$3	US-PGPUB; USPAT	AND	ON	2007/10/23 17:08

## EAST Search History

S15 2	39	wood.in. and (liquid adj crystal).ti.	EPO; DERWENT	AND	ON	2007/10/23 18:03
S15 3	1	Wo-200208825-\$.did.	EPO; DERWENT	AND	ON	2007/10/23 18:04
S15 4	644	surface adj energy same (acrylate or (polydimethyl adj siloxane))	US-PGPUB; USPAT	AND	ON	2007/10/24 08:40
S15 5	77	(lower or reduce) near4 surface adj energy same (acrylate or (polydimethyl adj siloxane))	US-PGPUB; USPAT	AND	ON	2007/10/24 08:41
S15 6	2465	(alignment adj layer) and refractive index	US-PGPUB; USPAT	AND	ON	2007/10/24 09:13
S15 7	599	(alignment adj layer) and refractive index and viscosity	US-PGPUB; USPAT	AND	ON	2007/10/24 09:13
S15 8	561	(alignment adj layer) and refractive index and viscosity and liquid adj crystal	US-PGPUB; USPAT	AND	ON	2007/10/24 09:15
S15 9	11	(alignment adj layer) and refractive index and viscosity and liquid adj crystal and immiscible	US-PGPUB; USPAT	AND	ON	2007/10/24 09:15
S16 1	46	(alignment or orientation).ti. and refractive index and viscosity and liquid adj crystal	US-PGPUB; USPAT	AND	ON	2007/10/24 09:16
S16 2	330	(refractive adj index) near10 (match\$2 or "same") same (alignment or orientation) same (liquid adj crystal)	US-PGPUB; USPAT	AND	ON	2007/10/24 09:28
S16 3	488	(refractive adj index) near10 (equal or match\$2 or "same") same (alignment or orientation) same (liquid adj crystal)	US-PGPUB; USPAT	AND	ON	2007/10/24 09:43
S16 4	2716	(refractive adj index) same (alignment or orientation) and particle	US-PGPUB; USPAT	AND	ON	2007/10/24 10:29
S16 5	390	(refractive adj index) same (alignment or orientation) adj (layer or film) and particle	US-PGPUB; USPAT	AND	ON	2007/10/24 10:30
S16 7	4	(refractive adj index) near10 "1. 3"\$1 same (alignment or orientation) adj (layer or film)	US-PGPUB; USPAT	AND	ON	2007/10/24 10:32
S16 8	97	(refractive adj index) near10 "1."\$2 same (alignment or orientation) adj (layer or film)	US-PGPUB; USPAT	AND	ON	2007/10/24 10:33
S16 9	1122	(alignment or orientation).ab. and particles and refractive adj index	US-PGPUB; USPAT	AND	ON	2007/10/24 10:36
S17 0	718	(alignment or orientation).ab. and particles and refractive adj index and liquid adj crystal	US-PGPUB; USPAT	AND	ON	2007/10/24 10:36



## EAST Search History

S17 1	595	(428/1.2\$).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/10/24 10:38
S17 2	31	(alignment or orientation).ab. and particles and refractive adj index and liquid adj crystal and S171	US-PGPUB; USPAT	AND	ON	2007/10/24 10:38
S17 6	67	428/1.2\$.ccls. and particles and (refractive or refraction)	US-PGPUB; USPAT	AND	ON	2007/10/24 10:43
S17 9	149	428/1.2\$ and (refractive adj index)	US-PGPUB; USPAT	AND	ON	2007/10/24 11:18
S18 2	1	"6249332".pn.	US-PGPUB; USPAT	AND	ON	2007/10/24 11:27
S18 6	416	liquid adj crystal and (immiscible or imiscible) and polymer and ((refractive index) or (index of refraction)) and viscosity	US-PGPUB; USPAT	AND	ON	2007/10/24 11:51
S18 8	6241	particles and refractive adj index and liquid adj crystal and polymer	US-PGPUB; USPAT	AND	ON	2007/10/24 13:28
S18 9	1452	particles and refractive adj index and liquid adj crystal and "428". clas.	US-PGPUB; USPAT	AND	ON	2007/10/24 13:28
S19 2	252	particles and refractive adj index near ("1."\$2) and liquid adj crystal and "428".clas. and viscosity and optical	US-PGPUB; USPAT	AND	ON	2007/10/24 13:30
S19 9	165	low near3 refraction near5 polymer	US-PGPUB; USPAT	AND	ON	2007/10/24 15:12
S20 1	56	low near3 refraction near5 polymer and liquid adj crystal	US-PGPUB; USPAT	AND	ON	2007/10/24 15:12
S20 3	473	low near3 refractive near5 (polymer or monomer) and liquid adj crystal	US-PGPUB; USPAT	AND	ON	2007/10/24 15:43
S20 4	260	low near3 refractive near5 (polymer or monomer) and liquid adj crystal and viscosity	US-PGPUB; USPAT	AND	ON	2007/10/24 15:44
S20 5	236	low near3 refractive near5 polymer and liquid adj crystal and viscosity	US-PGPUB; USPAT	AND	ON	2007/10/24 15:44
S20 6	183	low near3 refractive near5 polymer and liquid adj crystal and viscosity and particles	US-PGPUB; USPAT	AND	ON	2007/10/24 15:47
S20 7	1	09/618804.app.	US-PGPUB; USPAT	AND	ON	2007/10/24 15:53
S20 8	11	surface adj energy near20 gradient and liquid adj crystal	US-PGPUB; USPAT	AND	ON	2007/10/24 16:24
S20 9	563	surface adj energy near10 (different or varying or higher or lower) and liquid adj crystal	US-PGPUB; USPAT	AND	ON	2007/10/24 17:14

## EAST Search History

S21 0	359	alignment adj film near20 protective	US-PGPUB; USPAT	AND	ON	2007/10/24 17:21
S21 1	0	alignment adj film near20 removable near5 protective	US-PGPUB; USPAT	AND	ON	2007/10/24 17:21
S21 4	1	11/193378.app.	US-PGPUB; USPAT	AND	ON	2007/10/24 17:36
S21 6	302	surface near4 energy and homeotropic and liquid adj crystal and (alignment or orientation)	US-PGPUB; USPAT	AND	ON	2007/10/24 17:54
S21 8	285	surface near3 energy and homeotropic and liquid adj crystal and (alignment or orientation)	US-PGPUB; USPAT	AND	ON	2007/10/24 17:54
S21 9	40	surface near3 energy near10 substrate and homeotropic and liquid adj crystal and (alignment or orientation)	US-PGPUB; USPAT	AND	ON	2007/10/24 17:55